

CLAIMS:

1. A slide assembly for use with a molding or casting system comprising:

a base mountable to a die block half;

a slide engagable with the base such that the slide is movable relative to the base in a first direction and a second direction, wherein the first direction is opposite of the second direction; and

a cam lever removably insertable into the slide, wherein the cam lever is adapted to move the slide relative to the base through cam action.

2. The slide assembly of claim 1, wherein the cam lever is adapted to move the slide in the first direction relative to the base as the cam lever is inserted into the slide, and is adapted to move the slide in the second direction relative to the base as the cam lever is removed from the slide.

3. The slide assembly of claim 2, wherein the cam lever comprises a head and a tail positioned at an angle to the head, wherein the angle between the head and the tail is greater than ninety degrees and less than one-hundred-and-eighty degrees.

4. The slide assembly of claim 2, wherein the cam lever comprises a head and a tail positioned at an angle to the head, wherein the angle between the head and the tail is greater than one-hundred-and-thirty degrees and less than one-hundred-and-sixty degrees.

5. The slide assembly of claim 1 further comprising a first circuit and a second circuit coupled to the base, wherein the first circuit is adapted to provide

signals to limit the movement of the slide relative to the base in the first direction, and wherein the second circuit is adapted to provide signals to limit the movement of the slide relative to the base in the second direction.

6. The slide assembly of claim 5, wherein the first circuit and the second circuit are further adapted to provide signals for a plurality of operations based upon the movement of the slide relative to the base.

7. The slide assembly of claim 1, wherein the cam lever extends through the base when the cam lever is inserted through the slide for preventing the slide moving relative to the base.

8. The slide assembly of claim 1 further comprising a hydraulic coupling connected to the slide for moving the slide relative to the base through hydraulic power.

9. A slide assembly for use with a molding or casting system comprising:

a base adapted to be mounted to a first die block half comprising tracks;

a slide adapted to engage the tracks of the base for allowing the slide to move in a first direction and a second direction relative to the base; and

a cam lever comprising a head and a tail positioned at an angle to the head, wherein the cam lever is removably insertable

through the slide for moving the slide relative to the base through cam action;

wherein the cam lever is adapted to move the slide in the first direction relative to the base as the cam lever is inserted into the slide, and is adapted to move the slide in the second direction relative to the base as the cam lever is removed from the slide.

10. The slide assembly of claim 9, wherein the cam lever is further adapted to connect with a second die block half, wherein the first die block half is movable relative the second die block half, wherein the cam lever is inserted into the slide when the first die block half moves toward the second die block half, and wherein the cam lever is removed from the slide when the first die block half moves away from the second die block half.

11. The slide assembly of claim 9, wherein the cam lever is further adapted to connect with a second die block half, wherein the second die block half is movable relative the first die block half, wherein the cam lever is inserted into the slide when the second die block half moves toward the first die block half, and wherein the cam lever is removed from the slide when the second die block half moves away from the first die block half.

12. The slide assembly of claim 9 further comprising a hydraulic coupling connected to the slide for moving the slide relative to the base through hydraulic power.

13. The slide assembly of claim 9 further comprising a first circuit and a second circuit coupled to the base, wherein the first circuit is adapted to provide signals to limit the movement of the slide relative to the base in the first direction, and wherein the second circuit is adapted to provide signals to limit the movement of the slide relative to the base in the second direction.

14. The slide assembly of claim 9, wherein the tail of the cam lever extends through the base when the cam lever is inserted through the slide for preventing the slide moving relative to the base.

15. The slide assembly of claim 14 further comprising a first circuit and a second circuit coupled to the base, wherein the first circuit is adapted to provide signals to limit the movement of the slide relative to the base in the first direction, and wherein the second circuit is adapted to provide signals to limit the movement of the slide relative to the base in the second direction.

16. A slide assembly for use with a molding or casting system comprising:

- a base adapted to be mounted to a first die block half;
- a slide engagable with the base such that the slide is movable relative to the base;
- a cam lever adapted to be connected to a second die block half and removably insertable through the slide for moving the slide relative to the base through cam action; and
- a circuit coupled to the base and adapted to provide signals to limit the movement of the slide relative to the base;

17. The slide assembly of claim 16 further comprising a hydraulic coupling connected to the slide for moving the slide relative to the base through hydraulic power.

18. The slide assembly of claim 16, wherein the tail of the cam lever extends through the base when the cam lever is inserted through the slide for preventing the slide moving relative to the base.

19. The slide assembly of claim 16, wherein the first die block half and the second die block half are capable of opening and closing around a core, wherein the cam lever is inserted into the slide when the first die block half and the second die block half close around the core, and wherein the cam lever is removed from the slide when the first die block half and the second die block half open around the core.

20. The slide assembly of claim 16, wherein the cam lever comprises a head and a tail positioned at an angle to the head, wherein the angle between the head and the tail is greater than one-hundred-and-thirty degrees and less than one-hundred-and-sixty degrees.